

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>T5276.CIP2.P</b>	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. <b>PCT/US03/0311</b>	International filing date (day/month/year) <b>18 March 2003 (18.03.2003)</b>	Priority date (day/month/year) <b>18 March 2002 (18.03.2002)</b>
International Patent Classification (IPC) or national classification and IPC <b>IPC(7): H01B 3/00 and US Cl.: 381/77, 79</b>		
Applicant <b>AMERICAN TECHNOLOGY CORP.</b>		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 2 sheets, including this cover sheet.

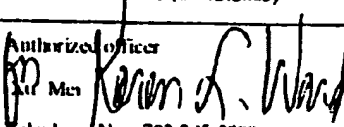
☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of — sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of report with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand <b>16 October 2003 (16.10.2003)</b>	Date of completion of this report <b>04 December 2003 (04.12.2003)</b>
Name and mailing address of the IPEA/US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703)305-3230	Authorized officer  Pat. Mgr. Karen A. Ward Telephone No. 703-305-3900

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
PCT/US03/08311**V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanation supporting such statement****1. STATEMENT**

Novelty (N)	Claims 1-16	YES
	Claims NONE	NO
Inventive Step (IS)	Claims 1-16	YES
	Claims NONE	NO
Industrial Applicability (IA)	Claims 1-16	YES
	Claims NONE	NO

**2. CITATIONS AND EXPLANATIONS**

Claims 1-16 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest a parametric speaker sound emitting device for providing at least one new sonic frequency as a by-product of emitting at least two ultrasonic frequencies from an ultrasonic frequency emitter that including an emitting perimeter of ultrasonic material with an outer radius and an inner radius; and a ratio of (i) a difference between the inner radius and the outer radius of the emitting perimeter to (ii) the outer radius of the emitting perimeter is within a numerical range of 0.1 to 1.0 as construed and recited in claim 1. A sound emitting device for generating one new sonic frequency from an ultrasonic frequency emitter with specific elements and connections as construed and recited in claim 11. A method for enhancing efficiency of a parametric sound emitting device for providing one new sonic frequency with respect to energy based upon emitter surface area of an ultrasonic frequency emitter with specific functional steps as construed and recited in claim 15.

Claims 1-16 meet the criteria set out in PCT Article 33(4), and thus meet industrial applicability because the subject matter claimed can be made or used in industry.

**NEW CITATIONS**

NONE